

PROOFPreliminary

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PULSE CAMERA SPECIFICATIONS*One*

1.0 Our Pulse Camera System consists of the following components:

- 1.1 Camera Body with 50mm lens
- 1.2 1000 ft. magazine
- 1.3 400 ft. magazine
- 1.4 100 ft. magazine
- 1.5 Reflex Viewfinder (modified VISOFLEX II)
- 1.6 Telephoto lens support
- 1.7 Mirrotel lens support
- 1.8 Boresight
- 1.9 2 ----- ampere hour power packs
- 1.10 Extension power cables
- 1.11 Adapter mount for K-100 sensor
- \* 1.12 Blimp
- \* 1.13 Spare Parts

2.0 Camera Body

The camera body incorporates the following features:

- 2.1 Film transport capable of proving a complete cycle in 1/2 seconds.
- 2.2 Variable shutter to provide shutter speeds of 1/5, 1/10, 1/25, 1/50, 1/100, 1/200, 1/400 second.

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\* NOT FUNDED

2.3 Automatic exposure control to provide 1/4 stop accuracy over a wide range of shutter and diaphragm settings. The sensitivity of the photo cell permits automatic shutter control operation at light levels as low as 1/2 foot candles. Film speed settings provide for films with ASA ratings of 10, 32, 80, 160, 250, 400.

The exposure control system is of the "closed loop" design and controls the opening of the shutter. An auxiliary variable density blade provides the means for modulating the light reaching the cell. Light sensing and shutter adjusting occur between exposures.

#### 2.4 Data Recording

A data recording chamber including a motor driven time indicating device and pulse lamp is included. Time recordings, readable at 15mm intervals, are put at the corner of each frame.

#### 2.5 Low Light Level Switch

In order to conserve power, and film, the camera including exposure control system will shut down when the subject illumination falls to a level which is two stops below normal. The camera will remain shut down until the subject illumination reaches a point which is two stops below the normal exposure.

## 2.6 Camera Controls

The following controls are included on the camera:

- 2.6.1 Manual shutter setting knob
- 2.6.2 "On" - "Off" Power switch
- 2.6.3 Shutter selector switch for selecting manual or automatic operation
- 2.6.4 A. S. A. selector switch to set the automatic shutter control for the required film speed.

All the controls with the exception of the manual shutter control are protected by a tamper-proof cover.

## 2.7 Control Box

A small, hand held, control box is provided at the end of a three foot cable. Two controls are included. These are:

- 2.7.1 Shutter selector, which permits the operator to take time exposures as well as instantaneous exposures. This control also permits boresighting through the lens with the shutter wide open.
- 2.7.2 Push button, to pulse the camera. Depressing the button causes the camera to take ~~pictures~~ pictures at the rate of two a second until released. When the shutter selector is set for "time", actuation of the push button causes the shutter to open fully. Release of the button will close the shutter and transport the film to the next frame.

A latching device is provided for use when long time exposures are desired or when boresighting.

2.8 Extension Cable

A 20 foot extension cable is provided to permit remote operation of the camera.

2.9 Reflex Housing

A modified Visoflex II is provided. This enables through the lens viewing and focussing with short barrel Leica lenses of 135mm focal length or longer. Shorter focal length lenses as low as 28mm may be used by removing the reflex housing. Lenses used without the reflex hood must be provided with Practina bayonet mounts.

2.10 Lens

A 50mm Zeiss Tessar f2.8 lens is provided with the camera. One yellow filter is included.

2.11 Magazines

All magazines are interchangeable. A film counter to indicate the amount of film remaining is built into each of the magazines. The pressure plates on each magazine are removable for easy cleaning.

2.11.1 The 400 ft. and 1000 ft. magazines are designed for use with film cores and must be loaded in the darkroom. A tell-tale on the cover, indicates whether film is being taken up.

2.11.2 The 100 ft. magazine is designed for use with standard daylight loading spools.

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Telephoto lens support

An adjustable lens support to accommodate a wide range of lens sizes is provided. The yoke can be set for barrels of up to

\_\_\_\_\_ inches. The rails allow the support to be extended up to \_\_\_\_\_ inches from the lens mount.

#### Power Pack

Two 28 volt power packs are supplied, each capable of delivering \_\_\_\_\_ ampere hours of power at 28 D. C. A single power pack can handle a 400 ft. load of film operating over a period of approximately \_\_\_\_\_ days. Two power packs in parallel, will handle a 1000 ft. magazine over a period of \_\_\_\_\_ days.

The power packs are made up of nickle cadmium cells which are hermetically sealed and are therefore spill-proof and leak-proof.